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EDITORIAL NOTE

Scientists and journalists, Glyptodontidae, and new dating of archaeological material from northeastern Brazil

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The present issue of the Annals of the Brazilian Academy of Sciences (AABC) has an interesting contribution about the interaction of journalists and scientists in Brazil. Communicating science to the public is quite a demanding task, but in recent years this activity has been worldwide regarded as an essential tool to establish stronger connections between the scientific community and the society (e.g., The Royal Society 1985). Efforts in that direction have been put forward in several countries with overall positive results (e.g., Peters et al. 2008), although not without criticisms (Dunwoody and Ryan 1985). There is no question that Brazilian scientists should take this task very seriously, particularly in the troubled waters that researchers will have to face in the years to come.

The good news is that in the country there is a growing trend of collaboration between scientists and media. Since 2012, for example, the National Council for Scientific and Technological Development (CNPq), which is the main funding agency of the country, has started to encourage researchers to list their public communication activities in the open access platform (Plataforma Lattes), where all curricula of those who apply for grants are mandatorily made public. However, the effectiveness of this and other such initiatives regarding science communication remains to be evaluated.

Luisa Massarani and Hans Peters conducted a survey of about 1000 scientists working in Brazil, covering a great variety of fields, in order to get the perspective of researchers about their interaction with the media. As a general result of this study, it has become clear that the perception of scientists regarding this interaction is positive, despite the fact that not always their expectations are met (Massarani and Peters 2016). Such studies are welcome, and allied with others that tackle the general configuration of scientific areas (e.g., Barata et al. 2014) and that deal with hot topics such as research integrity (e.g., Vasconcelos et al. 2015), might come in aid for policymakers to plan more effective ways to foster scientific development.

Paleontology is one of the border areas of Biological and Earth Sciences that has grown quite fast in recent years, with great contributions on several subjects, some based on amazing discoveries (e.g., Wang et al. 2015). In the last years, the AABC has published several papers on fossils, particularly of what is known as the megafauna, that includes some very large extinct mammals (Simpson 1983). There are still several

controversies surrounding these enormous vertebrates that once roamed the Earth (Fariña et al. 2014), most of which have become extinct at the end of the Pleistocene, although some extended well into the Holocene (e.g., Oliveira et al. 2014), an interesting subject that can be considered still understudied.

One of the highlights of the present issue of the AABC is the contribution by Alfredo Zurita and colleagues on the diversity of the Glyptodontidae, a group of extinct mammals, part of the megafauna, that look similar to modern armadillos. These animals are widely distributed in North and South America (e.g., Porpino et al. 2014, Zurita et al. 2016), most coming from Pleistocene deposits, where complete specimens have been recorded (Carlini and Zurita 2010). However, members of this group from older stratigraphic layers tend to be very scarce and incomplete. Here, Zurita et al. (2016) review the record of Pliocene glyptodonts, showing that their diversity is more reduced than previously expected. This has important biogeographic implications, as the authors have pointed out.

Lastly, I would like to call your attention to the paper published by Angela Kinoshita and colleagues about the age of material collected at an important archaeological site in Brazil: the Toca do Enoque. Located in the Serra das Confusões National Park in the Piauí State, this site has furnished some very interesting paintings, along with skeletons and shells (Faure et al. 2011). In their contribution, Kinoshita et al. (2016) compare two distinct methodologies that were independently applied to human teeth and shell fragments. The results were quite similar, indicating that the main deposit of the Toca do Enoque was formed around 4.800 years before present time. Such studies are stimulating since they can help us to get a clearer-picture about human occupation in the Americas, a subject that has sparkled contemptuous debates (e.g., Araujo 2015). Comparing distinct dating techniques as done by Kinoshita et al. (2016), provides a more reliable framework regarding dating of archaeological sites than others that mainly rely on classifications of artifacts, which can be controversial (e.g., Okumura and Araujo 2015).

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